

## ABSTRACT OF THE INVENTION

The present invention relates to systems and methods that maps industrial device data (*e.g.*, from data structures) to database tables that can be accessed *via* standard database interfaces. In various aspects of the present invention, elements associated with one or more data structures can be represented in one or more database tables. Typically, data structure elements are stored within respective columns of a record of a database table(s). Individual database tables can be accessed *via* a standard interface such as JDBC in order to store data within (*e.g.*, write) and/or retrieve data from (*e.g.*, read) a database table. In addition, a plurality of database tables can be concurrently accessed for distributed transaction processing. Thus, the subject invention provides access to industrial control data without having to install and/or execute custom or specialized software on either the industrial device or the system accessing the industrial device.